	Application No.	Applicant(s)	
Notice of Allowability			
	10/679,074 Examiner	BELL ET AL. Art Unit	
	Hiep Nguyen	2816	
The MAILING DATE of this communication a claims being allowable, PROSECUTION ON THE MERITS ewith (or previously mailed), a Notice of Allowance (PTOL- TICE OF ALLOWABILITY IS NOT A GRANT OF PATEN he Office or upon petition by the applicant. See 37 CFR 1.	S (OR REMAINS) CLOSED in 85) or other appropriate common FRIGHTS. This application is s	n this application. If not incl unication will be mailed in d	uded ue course. THIS
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☑ The allowed claim(s) is/are <u>1-20</u> .			
The drawings filed on are accepted by the Exam	niner.	*	**
Acknowledgment is made of a claim for foreign priorita) ☐ All b) ☐ Some* c) ☐ None of the:	*	or (f).	-00
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2. Certified copies of the priority documents h			
3. Copies of the certified copies of the priority	documents have been receive	d in this national stage appl	ication from the
International Bureau (PCT Rule 17.2(a)).	* * * * * * * * * * * * * * * * * * *	•	
* Certified copies not received:			•
oplicant has THREE MONTHS FROM THE "MAILING DA' ted below. Failure to timely comply will result in ABANDO HIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the	requirements
A SUBSTITUTE OATH OR DECLARATION must be su INFORMAL PATENT APPLICATION (PTO-152) which			r NOTICE OF
CORRECTED DRAWINGS (as "replacement sheets")	must be submitted.	*	
(a) \square including changes required by the Notice of Drafts	person's Patent Drawing Review	v (PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date			
(b) including changes required by the attached Examine Paper No./Mail Date	ner's Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CF each sheet. Replacement sheet(s) should be labeled as such	R 1.84(c)) should be written on the in the header according to 37 CF	ne drawings in the front (not R 1.121(d).	the back) of
DEPOSIT OF and/or INFORMATION about the deattached Examiner's comment regarding REQUIREME	eposit of BIOLOGICAL MATI NT FOR THE DEPOSIT OF BIO	ERIAL must be submitted DLOGICAL MATERIAL.	d. Note the
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Notice of References Cited (F10-692) Notice of Draftperson's Patent Drawing Review (PT0-94)		ummary (PTO-413),	10-102)
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of Biological Material	9.	_·	
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DETAILED ACTION

The Applicant is requested to submit formal drawings.

Reason for allowance

The following is an examiner's statement of reasons for allowance: the prior art of records fails to teach or fairly suggest a differential pair circuit generating a intermediate signal comprising: a trans-impedance circuit that is configured to operate from the first power supply voltage and the second power supply voltage comprising: a first inverter circuit having a first inverter input configured to receive the intermediate signal and the first inverter output is configured to provide an output signal that is responsive to the intermediate signal, a first transistor having a first gate, a first drain, and a first source, wherein the first gate is coupled to the first inverter output, the first drain is coupled to the first power supply, and the first source is coupled to the first inverter input, and a second transistor having a second gate, a second drain, and a second source, wherein the second gate is coupled to the first inverter output, the second drain is coupled to the second power supply, and the second source is coupled to the first inverter input as called for in claims 1 and 5; an apparatus for converting a differential serial to a single-ended output comprising: an operational trans-conductance means that is configured to provide a current to an intermediate node in response to the differential signal and a trans-impedance means that is configured to provide an output voltage in response to the current such that the output voltage corresponds to: a sum of a voltage level and a gate-to-source voltage of a first transistor when the current has a negative polarity, a difference of the voltage level and a gate-to-source voltage of a second transistor when the current has a positive polarity, wherein the operational trans-conductance amplifier and the trans-impedance means are arranged in cooperation with one another such that a voltage associated with the intermediate node approximately corresponds to a mid-supply voltage as called for in claim 14. Therefore, claims 1-20 are presently allowed.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep Nguyen whose telephone number is (571) 272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hiep Nguyen

05-26-04

MY-TRANG NUTON PRIMARY EXAMINER